

REMARKS

Claims 1-21 are pending in the application. Claims 10-26 stand withdrawn.

The title was objected to as not being descriptive of the invention. Applicants submit that the amendment to the Specification moots this objection and Applicants respectfully request that this objection be withdrawn.

The Official Action appears to indicate at page 3 that present claims 1-9 are product by process claims. If this is the case, then Applicants respectfully disagree. Claims 1-9 clearly refer to a “structure” and do not recite any process step limitations. Claims 1-9 are not product by process claims.

Claims 1-9 have been rejected under 35 USC § 112, second paragraph, for failing to point out particularly and claim distinctly, the subject matter which Applicants regard as their invention. In particular, the Examiner states that it is unclear what is meant by the structure being removable. Applicants respectfully traverse this rejection.

The Specification clearly defines what is meant by the term “removable material” at page 6, lines 10-12, which states:

“The term “removable material” used in this specification refers to any material that is removed from a dielectric layer, including porogens and sacrificial material, to form a porous dielectric layer.”

It is clear to one skilled in the art reading the Specification and the claims that the removable material is not in and of itself the dielectric layer, rather the dielectric layer includes a removable material, such as a porogen. The structure as claimed in claims 1-9 clearly recites at least 2 dielectric layers, each dielectric layer containing a removable material. The dielectric layer including the removable material is “pre-porous”. The removable material is a material capable of being removed to form a porous dielectric layer. See the Specification at page 7, lines 6-11. A description of such removal process, for the case where a porogen is the removable material, is found in the Specification at page 19, lines 6-12.

Applicants submit that claims 1-9 do point out particularly and claim distinctly their invention. Applicants respectfully request that this rejection be withdrawn.

Claims 1-9 have been rejected under 35 USC § 103(a) as being unpatentable over Kessler et al. (US 5,110,712). Applicants respectfully traverse.

As discussed above, Applicants' invention is directed to a structure having a first dielectric layer comprising a first removable material and a second dielectric layer comprising a second removable material. Each removable material being removable to form a porous dielectric layer.

The Kessler patent describes a structure having a multi-level dielectric layer that contains a polymer (such as polyimide) and an inorganic material. See column 2, lines 3-7. Each of the polymer and inorganic material forms a complete and separate dielectric layer. Removal of either material, such as by etching to form vias, removes that portion of the dielectric material completely. Nothing in this patent teaches or suggests a porous dielectric layer. Accordingly, nothing in this patent teaches or suggests a dielectric layer comprising a material that can be removed from the dielectric layer to form a porous dielectric layer.

Applicants submit that the Examiner has not made out a prima facie case of obviousness and respectfully request that this rejection be withdrawn.

Favorable reconsideration in the form of a notice of allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, reading "S. Matthew Cairns". The signature is written in a cursive, flowing style.

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Date: June 28, 2005